ABSTRACT OF THE DISCLOSURE

Microlens arrays (105) having high focusing efficiencies are provided. The high focusing efficiencies are achieved by accurately producing the individual microlenses making up the array at high fill factors. Arrays of positive microlenses are produced by forming a master having a concave surface-relief pattern (101) in a positive photoresist (21) using direct laser writing. Through this approach, the problems associated with the convolution of a finite laser beam with a desired profile for a microlens are overcome. The microlens arrays of the invention have focusing efficiencies of at least 75%.